

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (cancelled)
2. (previously presented) A system for preservation of a data record, the system comprising:
  - (a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;
  - (b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;
  - (c) a preservation medium for recording said print file;
  - (d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;
  - (e) a display for representing said at least one preview image;
  - (f) a storage apparatus for safekeeping of said human-readable preserved data record;
  - (g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; andwherein said at least one preview image is conditioned by a look-up table.
3. (previously presented) A system for preservation of a data record, the system comprising:
  - (a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data

record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said at least one preview image is conditioned by a spatial filter.

4. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said at least one preview image is bitonal.

5. (cancelled)

6. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said at least one preview image is an RGB color image.

7. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data

record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said at least one preview image is an CMY color image.

8. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said at least one preview image is a palletized color image.

Claims 9-17 (cancelled)

18. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said display comprises a CRT.

19. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data

record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said display comprises a touchscreen.

20. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

further comprising an operator console for entering instructions.

21. (cancelled)

22. (cancelled)

23. (previously presented) A system for preservation of a data record, the system comprising:

(a) an input handler for accepting a preservation request to preserve said data record, for accepting input metadata associated with said data record to form a metadata record, and for conversion of said data record and said metadata record to generate a formatted data record;

(b) a data processor for accepting said formatted data record, for generating at least one preview image from said formatted data record, and for encoding, from said formatted data record, a print file;

(c) a preservation medium for recording said print file;

(d) a writer for marking said print file onto said preservation medium to form a human-readable preserved data record;

(e) a display for representing said at least one preview image;

(f) a storage apparatus for safekeeping of said human-readable preserved data record;

(g) a data recovery apparatus for obtaining, from said human-readable preserved data record, said data record and said input metadata record; and

wherein said data processor is connected on a network.

24. (cancelled)

25. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is conditioned by a look-up table.

26. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is conditioned by a spatial filter.



27. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is bitonal.

28. (cancelled)

29. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is an RGB color image.

30. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is a CMY color image.

31. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said at least one preview image is a palletized color image.

32. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said preservation medium is photosensitive.

33. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said preservation medium comprises a metal plate.

34. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

- (a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;
- (b) a writer for marking said print file onto said preservation medium to form said preserved data record;
- (c) a display for providing said at least one preview image and for receiving said print instruction;
- (d) a storage apparatus for safekeeping of said preserved data record; and

wherein said preservation medium comprises a thermal medium.

35. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

- (a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;
- (b) a writer for marking said print file onto said preservation medium to form said preserved data record;
- (c) a display for providing said at least one preview image and for receiving said print instruction;
- (d) a storage apparatus for safekeeping of said preserved data record; and

wherein said preservation medium is an electrophotographic medium.

Claims 36-38 (cancelled)

39. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said writer images using an electron beam.

40. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said writer images using a radiant energy source.

41. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said display comprises a CRT.

42. (previously presented) A preservation apparatus for maintaining at least one preserved data record on a preservation medium, where said at least one preserved data record has a predetermined data format, the apparatus comprising:

(a) a data processor for accepting a data record that comprises input metadata, for providing at least one preview image comprising said data record, and for generating a print file from said data record in response to a print instruction;

(b) a writer for marking said print file onto said preservation medium to form said preserved data record;

(c) a display for providing said at least one preview image and for receiving said print instruction;

(d) a storage apparatus for safekeeping of said preserved data record; and

wherein said display comprises a touchscreen.

43. (original) A method for preservation of an original data record, the method comprising:

- (a) encoding said original data record in a format to form an encoded data record;
- (b) encoding a metadata record corresponding to said encoded data record;
- (c) processing said encoded data record to provide at least one preview image;
- (d) displaying said at least one preview image and accepting a print instruction; and
- (e) in response to said print instruction, recording said encoded data record and said metadata record on a preservation medium, as a human-readable preserved data record.

44. (original) A method for preservation of a data record according to claim 43 wherein the step of processing said encoded data record comprises the step of simulating a writing operation.

45. (original) A method for preservation of a data record according to claim 43 further comprising the steps of:

- (a) scanning said encoded data record from said preservation medium;
- (b) processing said encoded data record to provide at least one retrieval preview image;
- (c) displaying said at least one retrieval preview image and accepting a retrieval instruction; and
- (d) in response to said retrieval instruction, processing said encoded data record to provide said original data record.

46. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record and said metadata record on said preservation medium comprises the step of recording on a photosensitive medium.

47. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record and

said metadata record on said preservation medium comprises the step of recording on a thermal medium.

48. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record and said metadata record on said preservation medium comprises the step of recording on an inkjet medium.

49. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record comprises the step of using a light source to write the data onto said preservation medium.

50. (original) A method for preservation of a data record according to claim 49 wherein said light source comprises a laser.

51. (original) A method for preservation of a data record according to claim 49 wherein said light source comprises an LED.

52. (original) A method for preservation of a data record according to claim 49 wherein said light source comprises an OLED.

53. (original) A method for preservation of a data record according to claim 49 wherein said light source comprises a lamp.

54. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record comprises the step of applying an ink to write the data onto said preservation medium.

55. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record comprises the step of using a thermal printhead to write the data onto said preservation medium.



56. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record on said preservation medium comprises the step of recording said encoded data record and said metadata record on a photosensitive medium.

57. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record on said preservation medium comprises the step of recording said encoded data record and said metadata record on a metallic medium.

58. (original) A method for preservation of a data record according to claim 43 wherein the step of recording said encoded data record on said preservation medium comprises the step of recording said encoded data record and said metadata record on a thermal medium.

59. (cancelled)

60. (original) A method for preservation of a data record according to claim 43 wherein the step of accepting a print instruction comprises the step of accepting a touchscreen command.

61. (original) A method for preservation of a data record according to claim 43 wherein the step of displaying said at least one preview image comprises the step of using a browser.

62. (cancelled)

63. (previously presented) A system for preservation of a data record comprising:

- (a) converting said data record to a rasterized image;
- (b) preprocessing said rasterized image to generate a preprocessed image;

(c) simulating a retrieved data record to generate a simulated retrieved data record comprising:  
simulating a media writer;  
simulating a media;  
simulating a retrieval scanner;  
(d) postprocessing said simulated retrieved data record to generate a postprocessed simulated retrieved data record;  
(e) displaying said postprocessed simulated retrieved data record;  
(f) prompting a user for approval of said postprocessed simulated retrieved data record;  
(g) if said postprocessed simulated retrieved data record is approved by said user, write said preprocessed image to said media; if said postprocessed simulated data record is not approved by said user, cancel preservation operation.

64. (previously presented) A system as in claim 63 comprising:

- (i) storing said media; and
- (j) recovering said preprocessed image.

65. (previously presented) A system as in claim 63 wherein said rasterized image is in human readable format.

66. (previously presented) A system as in claim 63 wherein said media is an analog media.